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Designing Futures: A Model for Innovation, Growth and Sustainability of the Craft and Design Industry

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Abstract: An industry development program, Designing Futures, has engaged design practitioners in new development approaches to evolve their work and advance the craft and design sector over a decade. This paper describes the context, development and evolution of a cluster-led model, the Designing Futures Cluster Program, aimed at building capacity in the craft and design field in Western Australia. Through a framework encouraging groups of practitioners to collaborate, it provides design, production, management and marketing mentoring and assistance. The Cluster Program is set in the context of the cultural and socio-economic contribution that creative industries can make to communities, and the impacts of policy and funding on fostering creative futures. Case study and action research methodologies were combined for the research, which resulted in a model. Using the results a comprehensive 'manual' was developed to articulate the model and guide future delivery of the program. The case study illustrates how cluster development enables increased productivity within creative practice, by mentoring and fostering links and professional networks with a range of industry representatives. The model, which has been proven to accelerate learning and professional growth of participants, is being explored for wider application.

Keywords: Culture and Arts, Social Sustainability, Systems Thinking, Creative Industries, Community Building, Industry Development, Craft and Design, Design Development, Mentoring, Skills Development

Introduction

THE WESTERN AUSTRALIAN (WA) craft and design industry is an emerging sector with significant growth potential. This paper discusses the evolution of a program developed to address issues impacting the sector's growth, including the standard of creative and business skills among practitioners, levels of innovation within the sector and the accessibility of key markets. Broader concerns also included regional economic trends and the rapidly evolving nature of craft and design practice at national and international levels.

The Designing Futures Cluster Program (Cluster Program) emerged after several years of work by FORM (a leading WA creative development agency in design and creative industries¹) to develop a 'design culture' in the sector and provide relevant professional develop-

¹ 'The Creative and Cultural Industries are those areas of practice that turn original creative content into commercial outcomes. They draw on the unique creative skills and distinctive natural materials of our state to create new creative content to local, national and international markets. The economic, social, and cultural contributions of these industries are essential elements of an advanced and thriving society. They are vital in determining the identity of a city or

ment opportunities to practitioners. The Designing Futures² initiative, launched as a multifaceted strategy to promote innovation and sustainability within the industry, commenced in 2002 with the Designing Futures International Forum. Topical issues were debated there, focusing on design, innovation, manufacturing and sustainability, with a special emphasis on the fine wood and studio furniture sector, a dominant component of craft and design in Western Australia. The forum broadened the perspectives of WA practitioners, invigorated academic and industry dialogues and networks, and catalyzed change. The accompanying exhibition benchmarked design to international standards; residencies by international practitioners offered professional development to local makers; and one-to-one mentoring addressed key skills deficiencies among emerging designers.

Although these initiatives had an immediate impact and provided momentum for change, FORM recognized that a structured, intensive and longer-term approach to industry development was needed to address the problems facing practitioners and engage the interests of strategic partners and policy makers. A lack of research into the WA craft and design field posed a challenge to formulating a long-term approach. Analysis of the creative industries in Western Australia was necessary. Gail Phillips identified the main challenges facing the creative industries' growth and sustainability in WA: a limited demand in the local market, a lack of critical mass, gaps in key skills areas, risk-aversion and low levels of entrepreneurship, failure to fully exploit opportunities for collaboration, remoteness from major markets, and limited access to capital.³

FORM collected information about the issues impacting practitioners and the industry. Using this research and experience gained from the early Designing Futures initiatives, FORM began to refine programs that delivered structured and highly tailored professional development to small groups of makers. It also began promoting inter-linkages and collaborations with other creative practitioners, government agencies, private industry, educational institutions, suppliers and manufacturers, seeing such 'clustering' as critical to alleviating the fragmentation and low levels of collaboration witnessed in the industry. Through intense lobbying, FORM attracted substantial funding support and strategic partnerships with diverse public and private organizations to evolve the Designing Futures initiatives.

Clustering emerged as a critical concept and focus for Designing Futures. Economists define clusters as concentrations of related or complementary businesses with active networks for making business transactions and communicating ideas; sharing specialized infrastructure, skills and services; and facing common opportunities and threats. Clusters are recognized as catalysts for industry development as they effectively foster innovation and competitiveness.⁴

We adopted elements of cluster theory in developing the Cluster Program. For the purpose of the Program, creative clustering is viewed in two ways. Firstly, we see a creative cluster

region, retaining talent and providing positive, substantial benefits to other industry sectors', *Perth's Creative Industries – An Analysis* cited in Australian Policy Online, viewed 24 May 2011, <<http://www.apo.org.au/research/perth-creative-industries-analysis>>

² Led by renowned design mentors, Designing Futures delivers business skills and product development mentoring to specially selected 'clusters' of Western Australian designers. FORM, viewed 18 May 2011, <<http://www.form.net.au/>>

³ Gail Phillips, *Transforming creativity: new ways of working in a networked culture*, UWA Perth International Arts Festival Seminar, unpublished, 2003 (no pagination).

⁴ Michael Porter, *on competition*, Harvard Business School Press, London, 1998; Michael Porter, *The competitive advantage of nations*, Collier Macmillan, London, 1990.

as a small unit of six to twelve creative individuals, pooling resources and co-mentoring around creative and business strategies and systems. Diversity of practice and experience is an important feature of some clusters, while others share a greater similarity in business structure. Secondly, we see clustering patterns within the larger picture of the innovation and creative industries sectors of Western Australia's economy. These include: organizations supporting policy development, infrastructure and initiatives; supporting industry that manufactures, supplies and distributes the products; tertiary design and craft education and training; and creative practitioners/practices.

In 2004, FORM established three pilot clusters involving 50 practitioners and tertiary students and using a collaborative learning approach. The program achieved a number of outcomes: a range of new products entered the market; participants exchanged knowledge about design and production; participants pursued their own business development; and practitioners developed the confidence to apply successfully for capital equipment or product development grants. Based on an analysis of the program and its outcomes, FORM identified three broad areas of skills development to target in its longer-term industry development programming: foundational design skills and processes (primarily in the fine wood sector) (see Figure 2), market-focused design-to-production development processes, and business skills (see Figure 3).

In 2005, FORM expanded the *Designing Futures* program to include new clusters and a broader range of practitioners (such as fashion and industrial designers). Long-term goals and a process of documenting the program were formulated. These goals included: develop processes that result in new and innovative designs with market value; generate sustainability, and improve visibility and viability of micro-design businesses; create a framework for collaborations between craftspeople and designers; build a framework for effective investment; develop a critical mass of viable and active craftspeople and designers; create a framework to develop networks between craftspeople, designers, government, private industry, educational institutions, suppliers and manufacturers; and establish pathways for networking myriad interests across creative industries.

This paper shows how the Cluster Program builds capacity in individuals and collectives. The context of the program, the case study, underlying teaching principles and applications of the research follow.

Program Context

Changing Markets and WA's Craft and Design Sector

The changing nature of local, national and international markets for craft and design is a critical factor impacting on the sector. WA practitioners are sustained principally by the local market, due to the difficulty and expense associated with exporting, and to practitioners' lack of understanding of more distant markets.

Makers based in the regions outside Western Australia's capital city of Perth rely heavily on the tourism market. This market is seasonal and typically demands products that are low-cost, easily transportable, made from local materials (particularly native timbers) and designed to reflect the local environment and culture. Due to skills gaps, the level of innovative product development for the tourism market is low and it is difficult for practitioners to compete and remain viable within this small market.

The tourism market is also important to Perth-based practitioners; however they also generate significant sales from government and corporate commissions, as well as individual consumers. Rising personal and corporate wealth in WA, and an increasingly outward-looking, cosmopolitan society, has increased demand for 'high-end' consumer products, such as hand-made or mass-customized designs. Linked to this rising affluence and demand for high-end products is a burgeoning architectural and interior design field, which has added to demand for contemporary local design.

Craft, Design and the Creative Industries

We see craft and design as part of the 'creative industries' — those industries that have their origin in individual creativity, skill and talent and that have a potential for wealth and job creation through the generation and exploitation of intellectual property.⁵ These industries include advertising, architecture, art, design, fashion, film, music, publishing, R&D, software, television, radio and video games.

In the early stages of the development of the Cluster Program, the creative industries were identified as an important growth area, rapidly increasing their size and economic value. In 2000, the creative industries comprised 7.3% of the global economy, worth US\$2.2 trillion and growing at 5% per year.⁶ In 2010 UNCTAD stated 'Global exports of creative goods and services... more than doubled between 2002 and 2008. The total value of these exports reached US \$592 billion in 2008, and the growth rate of the industry over that six-year period averaged 14%.⁷

Again, as a context for the development of the Cluster Program, at the time Western Australia had areas of strength within its creative industries. Dynamic sectors included architecture and urban design, industrial design, visual communication, digital content, music, fashion and film. On the whole, however, in WA the creative industries were (and still are) an untapped resource, contributing 2.2% to total state production, similar to that of communication services (2.0%) and accommodation, cafes and restaurants (2.7%).⁸ In 2006, creative workers comprised only 4.1% of the workforce, less than the national average of 5.3% and significantly lower than in the larger states of New South Wales (6.4%) and Victoria (5.9%).⁹

As well as being important engines of growth in their own right, the creative industries make a broader contribution to the economy by nurturing a creative skills base that supports innovation and can be leveraged into other sectors, such as manufacturing. In particular, design — the creative endeavour of devising and enhancing products, services and business methods — has substantial power to drive industry growth, boost jobs and generate positive flow-on effects to the broader economy and public wellbeing. This is particularly valuable for economies with declining manufacturing sectors that are struggling to adjust to the rise

⁵ *Creative industries mapping document 2001* (2nd end) Department for Culture, Media and Sport, London, 2001, viewed March 28, 2008,

<www.culture.gov.uk/Reference_library/Publications/archive_2001/ci_mapping_doc_2001.htm>

⁶ John Howkins, *The creative economy: how people make money from ideas*, Penguin Books, London, 2001.

⁷ UNCTAD United Nations Conference on trade and development, viewed 19 May 2011,

<<http://www.unctad.org/Templates/webflyer.asp?docid=14176&intItemID=1528&lang=1>>

⁸ Creative Industries Working Group, *Creative WA: a framework for the creative industries in Western Australia*, unpublished, August 2004, p. 41.

⁹ ARC Centre of Excellence for Creative Industries and Innovation, viewed 28 March 2008,

<http://eprints.qut.edu.au/archive/00011960/01/Australia_Creative_Economy_Information_Sheets_Release_1.pdf>

of low-cost manufacturing in Asia and elsewhere. Recognition of creativity and design as important tools for industries to boost productivity and competitiveness in today's global markets stands to benefit the craft and design sector in the future.

The Western Australian Government (at the time of the Cluster Program development) recognized the importance of the creative industries in their industry development policy statement;¹⁰ however, support for the broader field of such industries was very limited. Only music, fashion and digital creative content received significant policy and investment attention in those years.

At the time of development of this program, the Western Australian Government's 'four pillars' policy for diversifying the economy away from the current dominance of the resources industry, by placing a focus on the biotechnology, ICT, marine, defence and renewable energy industries, did not recognize the potential role of the creative industries to further boost sustainability. The intention of the Cluster Program was therefore to generate a platform from which to lobby government for further investment into the creative fields, in recognition that assisting these fields would be consistent with its objective of enlarging WA's knowledge economy. It was hoped that through continued lobbying by FORM, and the delivery of tangible, economic outcomes through the Cluster Program, the government would recognize craft and design, and the broader creative industries, as an additional 'pillar' in its economic agenda.

Research Methods

Brankovic, Eggleston and Lommerse formed the core of FORM's research and development team, together bringing years of experience in research, industry development and design education. At the time of research Brankovic and Eggleston were key drivers of industry development within FORM. Lommerse is a design educator and consultant, and brought to the team the knowledge of design, learning strategies and facilitation needed to develop a cohesive program. Collectively they researched the industry challenges and opportunities and from early trials with capacity building, the idea of a cluster program emerged.

Case Study and Action Research methodologies underpinned the research. The primary objective was to develop and describe a cluster framework for creative industries appropriate to the Western Australian context and conditions (see Figure 1).

¹⁰ Government of Western Australia, *Building future prosperity—creating jobs and wealth through industry development*, 2004, viewed 28 March 2008, <http://www.doir.wa.gov.au/documents/BI_BuildingFutureProsperity.pdf>

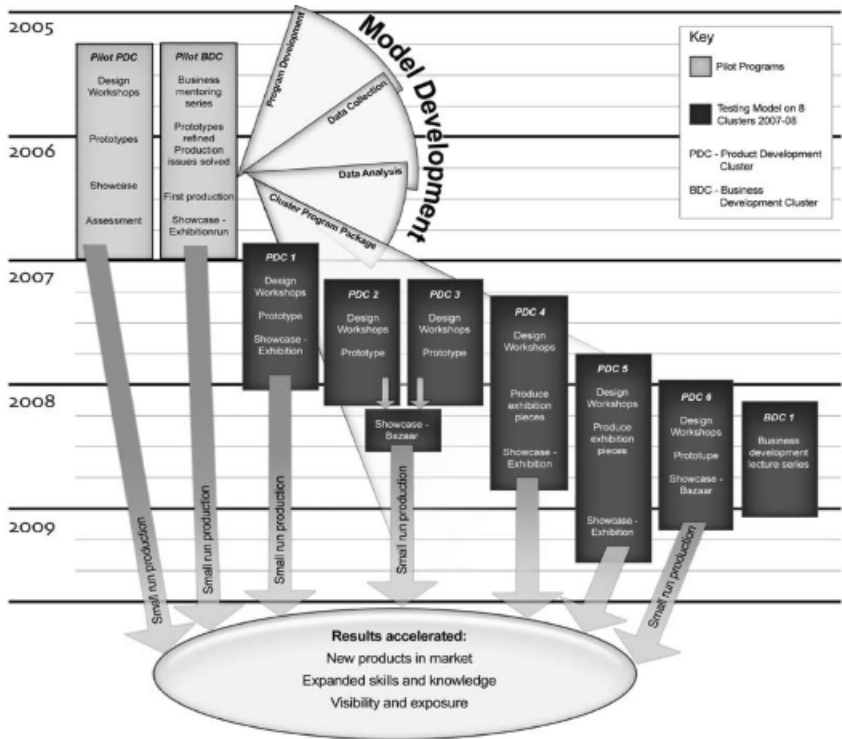


Figure 1: Action Research, Development and Testing of the Cluster Program

Illustrated are pilot clusters/model development from 2005-06 used to refine the program into the Cluster Program Package. Over 2007-08, the program was tested by renowned design mentors through eight new clusters. The results indicate how long-term cluster development could produce a critical mass.

Using 2005-2006 pilot clusters as the case study, the program framework was developed, delivered, recorded, analysed and continuously ‘tweaked’. Data collection included: mapping the progress of individuals; transcribing and photographing workshop experiments; facilitators’ reflections on process, progress and problems; and participant reflections on personal progress and learning through questionnaires and focus groups.

The case study illustrated the outcomes, benefits and challenges of the program delivered. The researchers were interested in these results for two purposes: to assist ongoing development of the pilot clusters practitioners, and for testing and refinement of the program. Themes emerged from the data analysis, providing information to refine and redirect aspects of the Cluster Program. This is classic action research activity, where actions and results are studied in order to develop and improve a model.

Case Study Results

The two pilot clusters challenged 15 participants to produce new and innovative products. The first cluster was taken through a process of design development to prototyping: for some

this was a new experience. This gave them design process experience they can use to create future products and extended their knowledge of materials, processes and technologies. Figure 2 demonstrates the design processes undertaken by Malcolm Harris an experienced fine wood craftsman in the first cluster. The second cluster was exposed to business concepts outside their previous experience, resulting in growth in professionalism and in knowledge of the design sector and its markets. Figure 3 shows the website development and branding undertaken by Holly Grace, a glass artist, one of the participants in the business development cluster.

Showcase and feedback were the final phases for the two pilot clusters, and included group exhibitions where practitioners were profiled while new products/product families were launched. The increased exposure, accompanied by extensive media coverage, raised the profile of the WA design sector as well as that of the individual designers. The exhibitions, with invitations and accompanying catalogues, attracted a broad audience including funding bodies, media, government agencies, buyers, specifiers and retailers. In addition, brochures were mailed out to local, national and international targeted audiences. Some participants showed ranges at national trade fairs and local arts bazaars, thus further broadening their exposure. The product packaging, exhibition catalogues and media coverage (see Figures 5, 6) provide tools for participants to market their products and evidence for ongoing fundraising to further their practice.

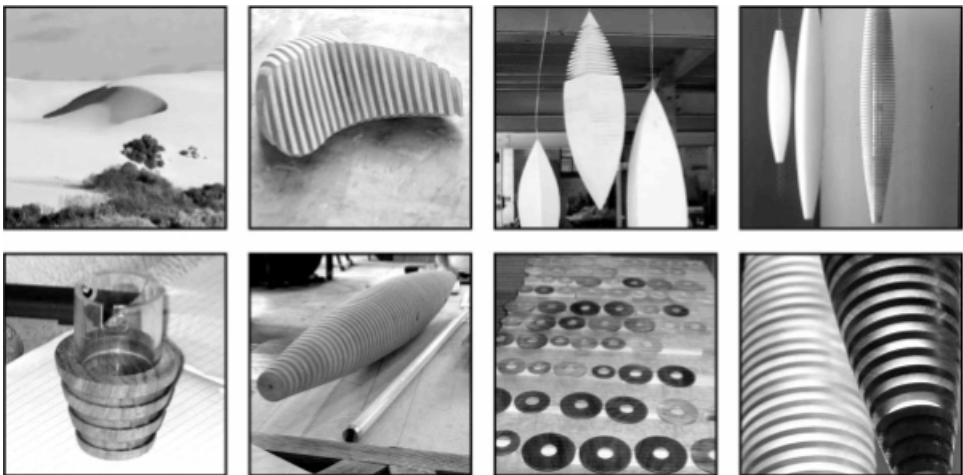


Figure 2: New Design Development Processes

Malcolm Harris, an experienced fine wood craftsman, was introduced to new processes. Top row: concept, design development, progressive modelling. Bottom row: production development and testing through to final prototype. Photos: 1 Malcolm Harris, 2-7 Marina Lommerse, 8 Michael Chestnutt courtesy of FORM.



Figure 3: Exposure Broadened through Website and Branding Development

Holly Grace¹¹ through goal setting and mentoring provided through the program, identified the need for a clear branding image and tools to expand her exposure internationally. Development funds provided through the Cluster Program were used to develop the website.



Figure 4: Launch Package Provided Ongoing Marketing Tool for Practitioners

¹¹ Holly Grace, viewed 28 March 2008, <<http://www.hollygrace.com/>>

The *Unveiled*¹² exhibition catalogue featured the members of the pilot Business Development Cluster 2005-06. Illustrated is a product card contained in the catalogue package—each card profiles a new product and the practitioner and acts as an ongoing tool to market products. Design, prototypes and photos: Carol Anne Cassidy. Photos: Michael Chestnutt courtesy of FORM



Figure 5: Wild Creeper Hanging Racks and Hooks—Concepted, Prototyped, Branded, Packaged, and Produced. Product is now Selling in 11 Outlets Nationally

Top row: design development, progressive prototypes, and final product. Bottom row: product branding and packaging.

Design, prototypes and photos: Penelope Forlano

Program objectives achieved include positive outcomes in the following areas:

Design and Production

- Forty prototypes/prototype families were either newly developed or refined and expanded from an existing piece, representing a 500% increase in products brought to prototype from the same practitioners in the previous year. Of these, twenty-three products/product families were refined for product launch and exhibition, with the making/manufacturing processes developed for all the selected products. Eight of the products/product families

¹² *Unveiled* exhibition and catalogue, viewed 18 May 2011, <<http://www.form.net.au/industry-development/exhibitions/past-exhibitions/unveiled>>

were brought to market readiness (tested, processes refined and costed, branding, packaging and pricing finalized). The remainder were prototyped ready for market testing, with the making process considered. Orders were taken for ten products launched now in state, national and international retail outlets.

- One participant received an Australia Council 'Manufacturer to Market' grant for \$30,000 to do a first run of production, as well as design and product branding.¹³ As a result, her products are selling in 11 retail outlets in Australia. (See Figure 5)
- Another participant received an \$18,500 Department of Culture and the Arts grant to develop prototypes into production products, resulting in the refinement and extension of his lighting range and a 2007 solo exhibition in Perth.¹⁴
- Participants developed a better understanding of production processes and options.
- Assistants and manufacturers were engaged, production runs outsourced, and distribution, bookkeeping and shipping occurred.

Management and Marketing Mentoring and Assistance

All participants achieved a greater clarification of business goals and understanding of planning. Participants from different clusters took a shared space at a high end Arts Bazaar in 2006 and 2007 (and still do). Sales indicated a positive response to new products.

- Seven of fifteen participants were selected to exhibit in one or more high level exhibitions/competitions over 2006-07 in Sydney, Toronto, London, Hong Kong, Leerdam (Netherlands) and Milan.
- Participants significantly increased their contact with both the design sector and retailers, resulting in new supplier and retail contacts and networks. Wholesale prices were confirmed and published.
- All participants achieved a greater understanding of marketing. Reassessment of strategies resulted in new business names, branding and logos being developed for three businesses; and packaging and branding were resolved for five products. Two businesses established promotional websites. Cluster participants and their products received extensive publicity nationally and internationally, providing business advantage as well as examples and role models for other WA designers. (See Figure 6.)

¹³ The Australia Council for the Arts is the Australian Government's arts funding and advisory body.

¹⁴ The Department of Culture and the Arts is the Western Australian Government's arts funding and advisory body (formerly ArtsWA).



Figure 6: Media Exposure Increased the Profile of the WA Design Sector and Participants¹⁵
Interview, (*inside*) magazine, reprinted in *Homes and Living Yearbook 2006*, Western Australia, pp. 182-183.

Developing Links and Professional Networks

More links have developed among makers in the community. Three of the participants developed a collaborative venture, which received grant funding. The fine wood pilot strengthened the case for an expanded fine wood studio and equipment investment for six participants in metro and regional areas. Participants were able to share knowledge and information due to the broadening of their networks. Strengthened teamwork and support networks have been evident in subsequent interaction outside the workshops and in participants assisting each other at special events. Some cluster participants are now mentoring in new clusters.

Participant Response

Overall, participant focus groups responded positively to the Cluster Program, including its workshops, facilitators, format, quality of speakers, mentoring and time scale. Participants were satisfied with the program and resources and the majority said they would recommend

¹⁵ Interview, (*inside*) magazine, reprinted in *Homes and Living Yearbook 2006*, Western Australia, pp. 182-183.

it to others. Suggested changes included greater clarity at the outset of the cost to participants and the workload involved, both for the program and in any showcase event.¹⁶

These positive outcomes resulted from learning focused on the individual's practice; for example, many participants developed their knowledge of market expectations as directly related to their current practice. Many also learnt about packaging and dealing with suppliers; and four participants learnt how to write grant applications. The pilot programs resulted in a strengthened network of art and design practitioners, and in increased local opportunities for selling products that extended beyond the Perth metropolitan area. Additionally, the network (or larger cluster) has expanded the number of specifiers, retailers and events or agencies that either promote products or buy them.

Evaluation

The outcomes indicated that the cluster framework accelerated capacity through structured professional development. The program went through a rigorous clarification of intent, roles, collective goals, effective activities and required resource commitments. This research was used to refine the Cluster Program into its current form, which is applicable to many different contexts of the craft and design industries.

Underlying Teaching Principles

The principles underpinning how the program is delivered are the key to its success. The Cluster Program harnesses and merges contemporary management and education concepts common in cluster theory, design practice and tertiary design degree teaching. Adult learning, experiential learning, systems thinking¹⁷ and design studio education provide a pedagogical framework for effective teaching and learning practices. The program includes case studies, real-life experiences and self-evaluation—all of which create the kind of learning environment adult learners respond to. This is based on the following teaching principles:¹⁸ programs should capitalize on the experience of participants; adults should be challenged to move to increasingly advanced stages of personal development; adults should have as much choice as possible in the availability and organization of learning programs; adults need to know why they need to learn something; adults need to learn experientially; adults learn best when the topic is of immediate value; adults participate best in learning contexts primarily based on direct involvement with practical, social, personal or research problems.

¹⁶ Marina Lommerse, Research report: developing a creative cluster framework to build innovation and capacity in Western Australia, Centre for Stronger Communities, Perth, 2006, unpublished.

¹⁷ 'A systems approach encourages the exploration of the relationships between social, environmental and economic interactions. This approach resists breaking a problem into its component parts for detailed examination. By examining the links and interrelationships of the whole system, patterns and themes emerge which offer insights and new meaning to the initial problem. In a community engagement context, encouraging a diversity of views can lead to a new understanding of the situation and the identification of opportunities for action that may not have otherwise occurred.' R. Bawden & R. Macadam, 1991, cited in *Effective Engagement: building relationships with community and other stakeholders, Book 1: An introduction to engagement*, Version 3, Victorian Government Department of Sustainability and Environment, Melbourne, 2005, p. 12, viewed 31 January 2011, <<http://www.dse.vic.gov.au/DSE/wcmn203.nsf/childdocs/-77F54463EE8D06B3CA257036001508E7-A5E28FF-DBEF43DD6CA25707C0014FA62?open>>

¹⁸ Malcolm S Knowles, *The adult learner: A neglected species*, Houston, Gulf Publishing Co, Book Division. 1990.

The workshops described in the next section emulate design education practices, including the use of a professional design studio, which is central to tertiary design programs. The pedagogy of the design studio is described by Shaffer as the activities, feedback and assessment which typically support cumulative development of a project, based on creating cycles of ‘production and reflection’.¹⁹ Each component of a project typically builds on the work of a previous assignment and on the feedback from its presentation. Shaffer explains that ‘essential to the success of design studio pedagogy is the establishment of a non-judgmental and supportive [approach], in which a series of imperfect solutions to a problem [are] proposed, analysed and refined until they eventually converge on a form that satisfie[s] the initial conditions’.²⁰

Collaboration, asset-based development²¹ and knowledge sharing are at the core of successful cluster development. The Cluster Program provides practitioners with both practical and theoretical knowledge in an environment where they learn to transform that knowledge creatively. Bringing people together in a cluster encourages systems thinking by having them share their different paradigms. Through exercises like mind mapping, critiques and social activities, the participants learn about the knowledge and skills of other participants and learn to trust them. This provides a wealth of ways to look at the problems the cluster is faced with, and leaves participants with processes they can use in continuing practice. Mentors are intended to work with participants as colleagues. Mentors may have more experience in some skill/knowledge areas, but participants have life experiences and skills/knowledge that enrich their cluster, and these need to be teased out to make it a vibrant and synergistic environment. The mentor’s role is to help participants discover how they can harness their knowledge to breathe life into their practice and to help their peers do the same. This approach encourages accelerated learning and development and counters the isolation prevalent in micro-practices.

Application of the Research

Following the pilot programs, the Designing Futures Cluster Program was written up to enable broad delivery of the program to diverse clusters. The Cluster Program Package, prepared for facilitators and mentors, provides guidance and resources in running the program. Underpinned by a clear, adaptable framework supported by interrelated resources, it is divided into two parts: The Cluster Program and Resources for the Cluster Program.

The Cluster Program

Being an adaptable framework rather than a rigid plan, the Cluster Program provides a consistent way to plan, deliver and evaluate outcomes via three phases.

¹⁹ D W Shaffer, *Portrait of the design studio: an ethnography of design pedagogy*, Madison, Wisconsin, University of Wisconsin Press, 2003, p. 19

²⁰ D W Shaffer, *Portrait of the design studio*, p. 19.

²¹ The Asset-Based Community Development Institute at Northwestern University is part of a movement that considers local assets as the primary building blocks of sustainable community development. Viewed 31 January 2011, <<http://www.abcdinstitute.org/>>

Phase 1: Pre-cluster Situation Analysis and Planning

For the Designing Futures project, planning the Cluster Program involved three steps: developing a cluster group and understanding its makeup; selecting the appropriate module and facilitator; and structuring the module by selecting priority activities and identifying resources.

Each cluster had a different composition of individuals with varying skill levels, processes and objectives, including product range and target market. The communities that the clusters were set within, and associated opportunities for forming links with other businesses and organizations, also differed. Therefore, the pre-cluster situation analysis allowed FORM, facilitators and participants to communicate and collaborate on important aspects of the goals, objectives, activities, resources and results. The Cluster Program manual provided strategies and tools to investigate and clarify individual cluster conditions in order to tailor the program for the specifics of each cluster.

Phase 2: Delivering a Cluster Program

Delivering the Cluster Program involves two steps: the first workshop – agreeing on goals, activities and outcomes; and delivering the module through a series of workshops, making adjustments as required. Over the course of the program the mentor aids each participant in developing action plans that relate both to their personal goals and to the overall objectives of the program. This reinforces the role of participants as active rather than passive, and being motivated by their own goals, they see value in the program and have an impetus to complete it.

Phase 3: Showcase and Post-cluster Evaluation

The final phase of the Cluster Program is to showcase the outcomes and evaluate the success and achievements of the Cluster group, through showcasing for evaluation and exposure, post-evaluation and feedback.

The showcasing and post-evaluation phase of the Cluster Program provided a vital learning step for the participants, in addition to much needed visibility and market testing. It allowed FORM, facilitators and participants to qualify and quantify achievements and results, and plan for continued development. A significant motivator for participants during earlier phases of the program, the showcase became a celebration, cemented the social fabric of the cluster, and provided a catalyst to engage with and strengthen the networks within the larger WA cluster. It provided an opportunity for evaluation from a diverse audience and for retailers to place orders.

Further evaluation of the program comes about through both formal and informal means, from mentors invited in during the process and via retailer, specifier and stakeholder responses to products during the showcase. Tools provided within the program offer simple and consistent ways to evaluate results (see Figure 7).

Post-cluster evaluation summary 1			
Objectives	Achieved		Short-term results with quantifiable evidence
	Yes	No	
1. Facilitate the skills development of a select group of practitioners to develop their object design and production skills	✓		<ul style="list-style-type: none"> 20 new prototypes were developed and 14 of those were developed into products/product families and selected for exhibition. Each member developed two to five new pieces to prototype level. 5 of the 7 participants used materials and related processes new to them in new prototypes.
			<ul style="list-style-type: none"> Participants were taken through a process of design development to prototyping. For some this was a new experience. It is assumed that this will leave them with design processes they can use to further future products. Participants were exposed to a learning environment that was outside their previous experience. Participants gained greater knowledge of market expectations. Participants were exposed to new ideas in design and making. Participants explored new directions, materials, techniques and technologies.

Figure 7: Tool 2: Post-cluster Evaluation—Results and Evidence

A series of objectives were established in *Phase 1: Pre-cluster situation analysis and planning* and were tailored to participant and context goals for each cluster program delivered. During and after *Phase 3: Showcase*, the objectives and evidence of results were measured and shared with those involved in the cluster, FORM, facilitators and shareholders. This excerpt from an evaluation summary from the pilot Product Development Cluster 2005-06 illustrates the results of objective 1.

Application

The research, showcase and accompanying publications provided evidence that the program could achieve the stated goals. The resultant investor confidence stimulated investment of \$350,000 to roll out the Cluster Program over 2007-2008, broadening the program to include regional centres, other media and greater numbers of participants. Eight new clusters were formed in regional and metropolitan areas. With 80 participants practising in diverse media—wood, jewellery, glass, ceramics, textiles and fine wood—the reach of the program was significantly expanded.

During the 2007-08 application, the model was trialled with different mentors and new cluster settings to test its adaptability (see Figure 1). The wider application proved successful; indications are that the desired outcomes were emerging. During this period FORM was seeking to develop infrastructure to progress and support the industry. FORM partnered with the Midland Redevelopment Authority (MRA) to set up and facilitate the establishment of the Midland Atelier, and is today working to continuing to grow this partnership to develop Midland Atelier as Western Australia's first cross-disciplinary design and creative industries centre, located in the historic Midland Railway Workshops. The Cluster Program, the learning it facilitated and the networks forged formed the basis for the initial growth of creative studios at the site. In addition, it was the work and successes of the Cluster Program that in large part attracted the attention of the MRA as a supportive partner, contributing \$12 million of buildings and land to enable the Atelier.

To date, the Midland Atelier has housed a working studio of furniture and object designer-makers, jewellers, a photographer, and diverse creative events. In addition, in line with the structure of the Cluster Program to bring in mentors and residents as expert guidance and stimulus to improve creative practice, the Atelier includes a program of International Creative Residencies through which local designers or groups are paired with international expertise for mentoring. Plans are in place to expand the facilities to include mixed-media studios, retail outlets, a digital creative media hub and other amenities to the Atelier, as funding can be sourced. The Pattern Shop, Nurses Post and Power House have already been refurbished and are the main areas in which creative practitioners are operating, with the Foundry redevelopment underway pending funding.

However, despite recognition of success and continued one-off funding grants, stable funding for a longer-term uptake of the Cluster Program is not in place, in large part due to the 2008 global financial crisis, which has severely impacted the funding and development over the past 18 months. In the interim, FORM is continuing efforts on some of the core components of the model: building industry networks, supporting professional development of the designer-makers at the Atelier, facilitating creative residencies and mentoring, and building access to market places. For instance, new funding streams through collective commissions are being explored for the furniture designer-makers of the Atelier as a studio; and new product development is being facilitated through a series of exhibition developments with key designer-makers. A showcase of jewellery outcomes from a cluster in *Illicit Making* in 2009 provided a launchpad for emerging jewellers, and in 2010, further works produced for the *From the Atelier* exhibition were taken into national collections. Further exhibitions for emerging practitioners paired with mentors are planned for 2011 and beyond.

Conclusions

The Cluster Program has been effective in building the capacity of the industry by delivering targeted and relevant training specifically for creative practices. The program to date has focused on ground-up development, that is, on building skills, product offerings and the visibility of small groups of practitioners. The program does: deliver a critical mass of new and innovative designs; expand practitioners' knowledge of technologies, materials and processes; improve business development skills; provide pathways for collaboration and networking; and provide effective avenues for visibility and exposure.

Despite the positive results, however, a number of challenges remain, including that of building the larger industry-wide cluster (illustrated in Figure 8). Fundamental changes to the structure are required in order to create a critical mass and promote greater synergies between creative practitioners, tertiary education institutions, and related businesses and organizations.

Access to infrastructure such as manufacturing and/or specialist workshops remains a challenge for many designers. Further, the current resources boom, which is the mainstay of the WA economy, is generating increased demand on the limited manufacturing available in the state. Consequently, local craft and design practitioners find it difficult to remain competitive using this resource, and also experience difficulty in finding small industries willing to participate in prototyping or producing limited production goods. The Midland Atelier is intended to go some way to address this limitation, with shared studio infrastructure

and access to specialist equipment. However, funding is needed to enable this hub's development, and further facilities on the site are needed.

Market testing, access to markets, distribution and promotion remain hurdles. While it is possible to increase practitioners' range of expertise, it is difficult for single practitioners with limited fiscal, time and skill resources to develop the necessary networks. Collaborative promotional activity, involving the sharing of resources, knowledge and systems, may offer one solution. Again, it is hoped that the Midland Atelier, through collective reputation building and marketing, will assist with this. The addition of a Digital Media Hub to this site will also aim to help open up access to new markets, audiences and networks across creative disciplines. Greater market access, and a collaborative sector that thinks about itself collectively as well as individually, will be needed to take the sector further.

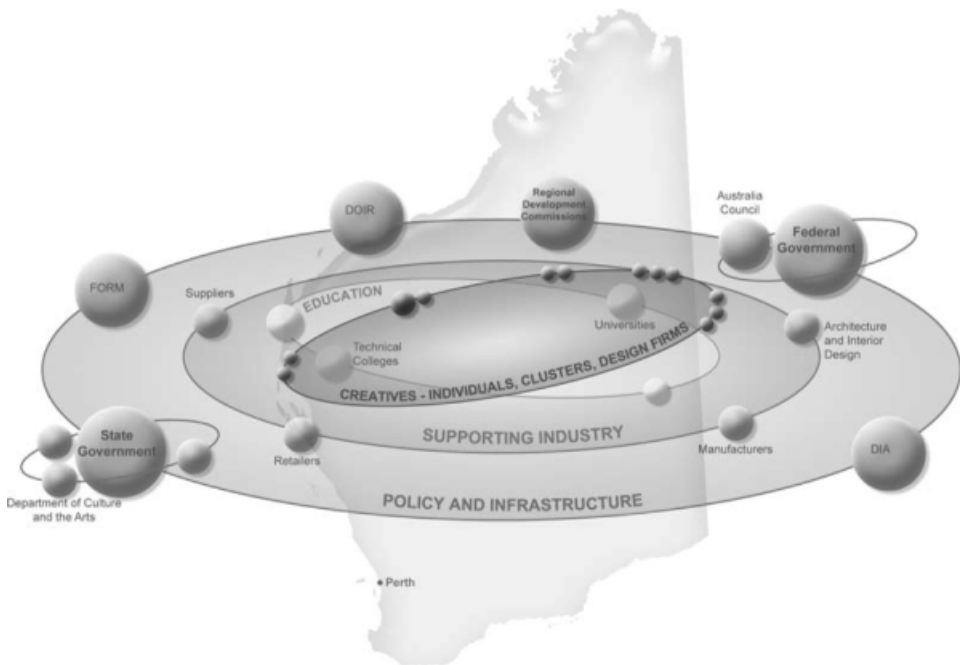


Figure 8: Large Clusters—ideally Interlinked and Supportive—are Spotty and Underdeveloped in Western Australia

A Way Forward

FORM expected that the *Designing Futures* programs would evolve. Considering the challenges identified, the focus over the next phase is to address shortfalls in the larger industry development picture. Below, some of the tactics and tools that can be used are outlined.

Advocate for Policy and Investment Support at Both State and National Levels

This can be done by: fostering a range of opportunities for creative practices, and increasing awareness of and support for creative industries as a way of strengthening the industry; exploring ways to instigate policy change at state and federal level and source stable funding, to better support and enable these creative industry initiatives to transition from short-term measures to longer-term strategies capable of shifting the benchmarks and character of the industry; and profiling of designers' processes, and the challenges and opportunities of their market context, through exhibitions and publications that stimulate industry support and provide case studies for learning.

Since the testing and implementation of this Cluster Program with the aim of increasing the recognition for creative industries, we have seen significant shifts at local, state and national levels that indicate a greater valuing of the creative industries and their potential. At a local and State level, in 2007 the City of Perth, in collaboration with the Department for Culture and the Arts, Department for Industry and Resources, and Department of Premier and Cabinet, undertook the study *Perth's Creative Industries – an Analysis*²². This report identified the total economic impact of creative industries in Perth as \$10.6 billion, and noted that growth in creative industries earnings is 25% higher than in other industries. At a national level, the prioritization of creative industries investment by Queensland and Victorian governments, along with the Australia Council for the Arts, has highlighted this growing recognition of their value and importance.

FORM's 2008 research publication, *Comparative Capitals*²³, illustrated the great and continuing need for advancing opportunities, investment and development for creative practitioners. The research showed that while Western Australia produces a high number of creative graduates, it has a net loss of creative talent across all disciplines, and its level of patents attained as well as investment levels are low.

The challenge now is to translate this recognition and evidence into sustained funding support and programming support. It will also be vital to support the growth and recognition of the Western Australian sector.

Develop Studio Infrastructure for the Craft and Design Sector, and Develop Broader Networks and a Professional Environment

The Midland Atelier creative industries centre is being developed at the heart of a large-scale urban redevelopment in Midland and will offer designers and artists access to needed infrastructure. This project offers the opportunity to develop studios, workshops, office space, capital-intensive equipment, retail outlets and gallery spaces. It has the potential to develop the profile of the local creative community, strengthen the links between synergistic businesses, and provide a home for a creative hub. The development will also encourage designers to explore more efficient production methods in order to enhance business opportunities. It

²² This report is the executive summary for the Perth Creative Industries' Mapping Project — a geographical analysis and qualitative analysis of the Creative Industries in Perth. *Perth's Creative Industries – An Analysis: Executive and Report Analysis*, The City of Perth, 2007, viewed 18 May 2011, <www.cityofperth.wa.gov.au/document-db/617.pdf>

²³ *Comparative Capitals*, FORM, 2008.

will facilitate—through infrastructure, services and reputation—the enhancement of the West Australian creative industry and attract people to it.

The training and professional development are a central aspect of the Midland Atelier. This will enable cluster training to have expanded impact and greater economies of scale by aligning with the creation of studios and workshops, and the associated network formation.

The Midland Atelier is currently being developed in stages. Stages 1 and 2 are in place, with the redevelopment of the Pattern Shop into a studio for creating furniture and object design, and the redevelopment of the Nurses' Post into studio and office space. Stage 3 is planned to be an Aboriginal Creative Development Studio, as a launch pad for Indigenous artists to explore across disciplines and media. Stage 4 is the subject of current funding submissions to form a Digital Media Hub in The Foundry to enable leveraging of new technologies, media, audiences and market platforms for practitioners across creative disciplines. The Foundry in the future will also hope to house mixed-media studios and retail outlets. It is hoped that funding support will enable the Cluster Program to be delivered in this setting, amplifying the clustering and development benefits further.

The flexibility of the Cluster Program model, and its recognition of setting and context, means it is easily transferable. There are opportunities for application of the model Australia-wide, as similar issues are emerging within the design sectors in other states. Industry-wide support for such programs is, however, essential. This will ensure that the networks, resources, opportunities and education structures continue to develop and provide the greater climate in which individual businesses can grow, become viable and flourish. Therefore, it is vital to continue working, not only at the level of the practitioner's micro-business, but also on the industry development level. To achieve this fundamental shift in the nature of the industry, solidifying policy support at state and federal level and translation of that into a substantial and sustained funding base are required.

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